

INCIDENT AND COMPLAINT SUMMARIES FOR FIRST QUARTER 2017*

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> Texas Department of State Health Services Regulatory Services Division Inspections Unit Radiation Branch

Copies of this report are available on the internet at http://www.dshs.state.tx.us/radiation/incident.shtm

^{*} Any complaint and/or incidents involving hospitals on or after August 30, 1999 are not releasable under the Texas Public Information Act & the Health and Safety Code Chapter 241.051(d). These summaries will not appear in this report.

Incident and Complaint Summaries 1st Quarter 2017

Table of Contents

Incidents Opened in First Quarter 2017	3	
Incidents Opened in a Previous Quarter and Closed First Quarter 2017	10	
Complaints Opened in First Quarter 2017	20	
Complaints Opened in a Previous Quarter and Closed First Quarter 2017	24	

I - 9457 - Source Retrieval -IRISNDT INC - Houston, Texas

On January 17, 2017, the Agency was notified by the licensee that on January 16, 2017 at 2 am a source retrieval had been completed. The source was Ir-192, 94 curies, serial number YA0408, used in a Spec 150 radiography device. The licensee reported that piping being imaged fell from the holding stand onto the guide tube crushing it and causing the source to become stuck and non-retractable. The radiographers called the radiation safety officer who after several unsuccessful attempts to open the guide tube had to cut the source from the cable and placed it into the device with long reach tongs. No member of the public was exposed and the RSO maintained his exposure to not exceed regulatory limits. The licensee stated the device was taken out of service, returned to the manufacture and provided a detailed description of the incident. No violations were cited.

File closed.

I - 9459 - Gauge Shutter Failure - Total Petrochemicals & Refining USA Inc, La Porte, Texas

On January 19, 2017, the Agency received a report from the licensee's radiation safety officer (RSO) stating the shutter on a Ronan model SA1-F37 gauge, containing a 50 millicurie cesium-137 source, failed to open during an operational check. The licensee obtained authorization from the Agency to temporarily continue operations with the gauge stuck in the shut position. On March 8, 2017 the gauge was repaired by the manufacturer. An improved seal was used to prevent contaminants from leeching into the shutter assembly. No licensee employee received any exposure as a result of this event. No violations were cited.

<u>I - 9460 - Lost Equipment Containing Radioactive Material - Amarillo Testing and Engineering -</u> Amarillo, Texas

On February 3, 2017, the Agency was notified by the licensee that two Troxler moisture density gauges, each containing an 8 millicurie cesium - 137 source and a 40 millicurie americium - 241 source had been lost in transit on return from being serviced in Idaho. On February 8, 2017, the Agency was notified that the devices had been found by the shipper in Salt Lake City and were on the way to the licensee. The licensee confirmed that the gauges were received and in good working condition. No violations were cited.

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I - 9461 - Badge Overexposure - Radiation Technology, Inc. - Odessa, Texas

On February 03, 2017, the Agency received a report from a dosimetry company reporting a dose of 11700 mrem for the fourth quarter of 2016. The badge was used for area monitoring along the fence line of a licensee. The Agency conducted an investigation and determine the dose came from a Cobalt - 60 source over 4 days in December 2016 due to corrosion of the source well in a storage device and lack of additional surveys during source removal. The Agency and licensee conducted calculations and determined that the fence line dose was over 100 mrem/hr however the closest member of the public living in a trailer did not exceed any dose limit. The licensee will increase the number of surveys when source removal operations are not completed due to complications. No violations were cited.

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I - 9462 - Contaminated Packages - GE Healthcare - Houston, Texas

On February 8, 2016, the Agency was notified by the licensee that three packages received were contaminated with technetium-99m. One of the packages was transporting thallium-210, and the other two were not radioactive materials shipments. The contamination did not seem to have come from the contents of the packages themselves, the receiving facility, or the origin facility. An inspector dispatched by the Agency confirmed that no other obvious sources of contamination were identifiable at the licensee's facility. The shipping company truck and driver were recalled to the location and surveyed for contamination by the licensee's personnel under supervision of the Agency inspector and no contamination was found. The origin facility does not handle technetium-99m as confirmed by Illinois radiation control and by the Nuclear Regulatory Commission's investigations. The shipping company's internal investigation revealed only one technetium-99m shipment around the same time, which did not cross paths with the packages involved in this incident, and which was received without contamination. No potential source for the contamination has been identified. No violations were cited.

I - 9463 - Gauge Shutter Failure - Motiva Enterprises LLC - Port Arthur, Texas

On February 9, 2017, the licensee notified the Agency that on February 8, 2017, it was attempting to close the shutter on a Vega SHLG-1 fixed nuclear gauge to shut down the unit it was mounted on for maintenance and the shutter would not close. The gauge contains a 2,000 millicurie cesium-137 source. The licensee reported there was no risk of exposure to employees or members of the public. A licensed service company is onsite and will secure a lead plate onto the device then remove the device and return it to the manufacturer for repairs. On March 9, 2017, the licensee reported the gauge had been repaired and was being returned to service. The licensee reported the failure was due to a build up of corrosion material around the operating mechanism. The licensee has placed enclosure devices on each gauge to prevent the problem in the future. No violations were cited.

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On February 15, 2017, the Agency received a report that a Hewlett-Packard gas chromatograph had gone missing during a laboratory move. The equipment contained a 15 millicurie nickel-63 source. This was discovered during an inventory on January 16, 2017. An investigation was completed on March 13, 2017. It was determined that on September 8, 2016, a significant amount of lab equipment was disposed of by a contracted company and it appears the chromatograph was included as waste because personnel failed to affix a safety seal which meant the item should stay in the lab. The source either entered a landfill or was sent to a metal recycler. The small amount of Nickel-63 does not pose a risk to the public since it is a low energy beta and enclosed within the housing. Corrective actions included new inventory procedures, educational seminars to the staff, and new radioactive seals on equipment that has special disposal requirements. No violations were cited.

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<u>I - 9465 - Radioactive Material Identified at Landfill - Methodist Stone Oak Hospital - San Antonio, Texas</u>

On February 17, 2016, the Agency was notified by a landfill operator that waste from the licensee had been identified containing radioactive material. The material was identified as diagnostic medical isotopes and allowed for disposal. This is the second such event in six months for the origin location. The licensee is purchasing a waste monitor and in the meantime will inspect trash compactors prior to departure. One violation was cited.

I - 9466 - Lost/Recovered Source of Radioactive Material - Shawcor - Reeves County, Texas

On February 20, 2017, the licensee's radiation safety officer (RSO) notified the Agency that one of its New Mexico radiography crews was performing radiographic operations on a pipeline that was being built in Reeves County, Texas. The crew finished work at one section and put the Spec 150 radiography device on the tailgate of their truck while they drove down the lease road and pipeline right-of-way to their next location. Unbeknownst to the radiographers, the device fell off the tailgate on the lease road. The licensee and crew learned of the loss after two contractors found the device, picked it up, put it in the back of their pickup, and took it to another of the licensee's radiography crews working on the pipeline. That crew called their site RSO who then called the crew who lost the device. The device was surveyed and readings were as expected with source in the fully shielded position. The safety plug was in the front of the camera. There was no damage to the device but the crank assembly, which was still attached, was damaged. Based on calculations by the RSO, the contractors' exposure was less than 0.2 millirem, which did not exceed any regulatory limit. During the investigation, it was learned that the crew was working in Texas and had neither transferred the source to the Texas license nor were they working under reciprocity. This issue was addressed with the RSO who instituted a system-wide transfer procedure for when devices and crews cross state lines to work at temporary job sites. Five violations were cited.

File closed.

I - 9467 - Damaged Source - Halliburton Energy Services Inc. - Houston, Texas

On February 25, 2017, the licensee notified the Agency that when one of its technicians was removing a 1.3 microcurie cesium-137 source from one of the calibration devices, he had punctured the source. All radiation safety officers (RSO) and technicians were wearing whole body dosimeters during the event. All four employees who were involved and/or responded to the event had dose ratings below 33 mrem DDE &TEDE for the monthly badge reading. Bioassay results showed negative results. Through discussion with Nuclear Regulatory Commission the source contamination event did not meet reportable limits. Corrective actions to prevent recurrence included creating a process for dismantling equipment, annual review of safety processes for dismantling of equipment by RSOs and annual training on safety processes for dismantling of equipment for all bunker employees. No violations were cited.

I - 9468 - Badge Overexposure - Medical City Dallas Hospital - Dallas, Texas

On February 27, 2017, the Agency was notified by the registrant of a potential overexposure to an individual working as a CT technologist. The individual's November-December 2016 badge had come back reading 50,196 millirem deep dose equivalent. The dose was indicated by filter analysis to be all from photons less than 40 kilo electronvolts in energy. No potential radiological reasons for this reading have been identified. Upon investigation, the registrant has determined that the badge reading does not reflect an actual dose to the individual. The individual's dose for the monitoring period was reassigned based on an average of the past two years. No violations were cited.

File closed.

I -9469 - Gauge Shutter Failure - Marathon Petroleum LLC - Texas City, Texas

On March 3, 2017, the Agency received a report from a licensee's contractor stating the shutter on a Ohmart Vega model SHF2 gauge, containing a 500 millicurie cesium-137 source, failed to shut during maintenance on an open vessel. A lead plate was affixed to the gauge to cover the source so it could be removed until repaired. The shutter was repaired on March 27, 2017 and source holder installed back on the vessel on March 29, 2017. The cause of the failure was internal corrosion in the shutter. No licensee employee received any exposure as a result of this event. No violations were cited.

File closed.

I - 9470 - Gauge Shutter Failure - Ticona Polymers - Bishop, Texas

On March 7, 2017, the Agency received notice that a fixed gauge shutter had been found to be inoperable the following day during a routine check. The shutter was stuck in the normal operating position. The gauge is a Berthold model LB7442D with 30 millicuries of cesium-137. The licensee obtained an exception to operate with the shutter stuck in the operating position. On March 16, 2017, the gauge was repaired and normal function was restored to the shutter mechanism. The cause of the failure was believed to be corrosion of the control rod, which has been replaced. No violations were cited.

I - 9471 - Lost Source - Raytheon - Dallas, Texas

On March 15, 2017, the Agency received notice that a general licensee had lost an air ionization anti-static device with an as-manufactured activity of 10 milicuries of polonium-210. The licensee discovered the missing source in February 2017. Additionally, a previously-lost similar source had been found by the general licensee and returned to the manufacturer/owner. The licensee has since implemented a more frequent inventory and additional accounting at work station checklists. The device has not been found. No violations were cited.

File closed.

I - 9472 - Stolen Moisture Density Gauge - Ranger Excavating Lp - Austin, Texas

On March 18, 2017, the licensee notified the Agency that a Troxler model 3440 moisture/density gauge had been stolen from the back of one of its trucks parked overnight at a worker residence. The gauge contained an 8 millicurie cesium-137 source and a 40 millicurie americium-241/beryllium source. The source which was locked had two independent locks cut and the gauge with case was stolen out of the truck. The employee had kept the gauge in the back of his truck at his residence overnight. Local and federal law enforcement were notified for ongoing search of the gauge. The employee was reprimanded and policies reviewed with all employees. No violations were cited.

File closed.

I - 9473 - Gauge Shutter Failure - Braskem America Inc. Freeport Operations - Freeport, Texas

On March 23, 2017, the Agency was notified by the licensee that on March 22, 2017 during six month inspection of devices, four devices were found with stuck shutters. The investigation into this event is ongoing.

File open.

I - 9474 - Contaminated Package - Medical Facility - Houston, Texas

On March 23, 2017, the Agency received a report from a licensee of external contamination on a package received at the medical facility. The Radiation Safety Officer (RSO) stated a package received from a transport company contained a Germania-Gallium generator. The device was intact and not leaking although the outside of the package had removable contamination. The highest level of contamination was 466 dpm/cm2 on the bottom of the box. There was some spread of contamination into portions of the transport vehicle, the driver's hands and shoes, the dolly used to remove the package from the vehicle, and the cart used to move the package in the medical facility. The level of contamination was below regulatory limits except for the bottom of the box. The contamination appeared to be a low energy beta emitter, with a short half-life in the three hour range. The radionuclide could not be identified due to lack of gamma or x-ray spectrum. The radiation could not be detected by a GM or scintillation probe. but only by a liquid scintillation counter. The contamination decayed by the next day. The route of the package started from a manufacturer in Germany, to an overseas transport company, to a commercial airline, to a United States transport company and finally ended with the licensee. An Agency investigation was unable to determine the source of the radioactive material. No health risk to the public occurred due to the low risk from a short lived beta emitter. No violations were cited.

File closed.

I - 9475 - Stolen Radioactive Material - Fugro Consultants - Fort Worth, Texas

On March 28, 2017, the Agency was notified by the licensee that a Troxler Model 3411 moisture/density gauge was stolen from one of its trucks. The gauge contains a 40 millicurie americium - 241 source and an eight millicurie cesium - 137 source. The gauge had been used at a job site the day before by a technician and taken to their home for the night, stored (locked) in the bed of the truck. Since the operating rod for the cesium source was locked in the shielded position and the case was also locked, the licensee does not believe a member of the general public would receive any significant exposure. Local law enforcement was notified. The gauge has not been recovered. No violations were cited.

I - 9278 - Radioactive Material Found - Houston Threading - Houston, Texas

On February 13, 2015, the Agency was contacted by the radiation safety officer (RSO) of a service company. The RSO stated he had been contacted earlier that week by a company concerning disposal of an unwanted radioactive source. The source was contained in a nuclear gauge installed inside a trailer used to test drill pipe. The RSO stated he was working with the company to dispose of the source. This service company was unable to come to an agreement for the disposal. The licensee contacted the Off-Site Source Recovery Program to assist them in disposing of the source. The licensee worked with this program and the source was picked up for disposal on February 9, 2017. No violations were cited.

File close.

I - 9424 - Gauge Shutter Failure - Arlanxeo USA LLC - Orange, Texas

On August 10, 2016, The Agency was notified by the licensee that during a daily inspection, the shutter on an Ohmart Vega SH-F1 nuclear gauge was found stuck in the open position, which is the normal operating position for the shutter. The gauge contained a 10 millicurie (original activity) cesium - 137 source. The shutter is operated by a pneumatic operator. The operating mechanism is located inside a steel box to prevent foreign material from interfering with the shutters operation. The licensee reported moisture had been trapped in the box causing the operating rod connecting pin to rust and break. The gauge was replaced on January 24, 2017. The licensee reported they have changed the lubrication fluid to help prevent the problem in the future. No violations were cited.

File closed.

I - 9441 - Gauge Shutter Failure - INEOS USA LLC - Alvin, Texas

On November 17, 2016, the licensee notified the Agency that during its semi-annual fixed nuclear gauge inspection on November 16, 2016, it had discovered that the shutter mechanism on an Ohmart Model SHLM-BR-2 had become inoperable. The licensee obtained authorization from the Agency to continue operation until repairs could be made during an upcoming outage. On February 10, 2017, repairs were completed by the manufacturer. The roll pin had sheered off and come out of the handle rod and the technician reported it was possibly the result of vibration. The licensee's radiation safety officer reported the straight rod may be switched to a cable connection, if the manufacturer determines this is a viable solution, in a future scheduled outage. There were no exposures to employees or members of the public as a result of this event. No violations were cited.

I - 9442 Device Leaked Radioactive Material - Westrock Texas LP - Silsbee, Texas

On December 23, 2016, leak confirmed. On November 17, 2016 the Agency received notice from a service company that it had a gauge which appeared to have leaked the radioactive material. The gauge potentially leaked Krypton-85 gas because the device failed to operate normally. The device activity did not produce acceptable measurements and was removed from service/operation. The device was removed from service by the service company and set into a storage area and labeled to prevent movement. The licensee made arrangements for the manufacturer to service the gauge stating to the Agency that it would take the manufacturer three weeks before it could schedule a visit to the plant site. The manufacturer must confirm that Kr-85 indeed did leak from the gauge. Device information provided included by the licensee: Manufacturer – Valmet/Metso, Gauge model - BMW2, Gauge S/N – 50048138, Isotope - KR-85, Activity – 400mCi, Source S/N – QA00168. On December 23, 2016, the licensee verbally confirmed the device had leaked the Kr-85 gas. The manufacturer will be providing a service description and details of how the device was checked and or repaired. No violations were cited.

File closed.

<u>I - 9443 - Radiography Source Disconnect - Nondestructive and Visual Inspection LLC - Mentone. Texas</u>

On November 21, 2016, the Agency was notified by the licensee that on November 19, 2016, one of its radiography crews was unable to retract a 66 curie iridium-192 source back into a Spec 150 radiography exposure device (camera). Following their third exposure on a pipeline inspection at a temporary job site, one of the radiographers retracted the source and went to the camera to disconnect the guide tube. The 6-foot guide tube was laying over the top of the pipe and the collimator was on the opposite side from the radiographer. When the radiographer disconnected the guide tube he pulled collimator to the top of the pipe. The radiographer's alarming rate meter sounded and his survey meter went off scale. He left the area, verified the two millirem per hour boundary and called the site radiation safety officer (SRSO). The SRSO who is on the license to perform retrievals, responded and retrieved the source. The control cable was found to be broken approximately one inch from the drive cable connector. The device and control assembly was sent to the manufacturer for evaluation and repair. The radiographer's and the SRSO's dosimetry was sent for processing. No individual received an exposure that exceeded a limit. The manufacturers report stated the failure of the drive cable was due to poor maintenance of the drive cable. The manufacturer stated the cable had become embrittled and packed with dirt. The licensee inspected all the crank out units in its inventory, provided additional training to the two radiographers involved, and placed the two radiographers on an increases oversite schedule. One noncited severity IV violation was noted.

I - 9445 - Orphaned Source - Surefire Industries LLC - Houston, Texas -

On December 1, 2016, the Agency received a report from a realty company that a previous tenant had vacated the property leaving behind a 200 millicurie (original activity) cesium - 137 source. The source was mounted on a short piece of pipe and did not appear to have been installed into a system. Agency attempts to contact the owner of the radioactive material were unsuccessful. On January 12, 2017, the Agency took possession of the material and placed it in storage for disposal. No violations were cited.

File closed.

<u>I - 9447 - Damaged Device Containing Radioactive Material - Accuren Inspection Inc. -</u> Beaumont, Texas

On December 10, 2016, the Agency was notified that on December 9, 2016, the licensee was required to perform a source retrieval of a 74.9 curie iridium -192 source. The exposure device associated with the source is a QSA 880 exposure device. They licensee reported the exposure device fell on the guide tube and crimped it to a point where the source could not pass by. The radiographers verified the boundaries and contacted the radiation safety officer. The licensee sent a qualified recovery team to the location. The recovery team cut the guide tube and was able to retract the source. No individual received an exposure that exceeded any limits. No member of the general public was exposed as a result of this event. The licensee stated the camera would be sent to the manufacturer for inspection. The maximum exposure dose for the recovery team was 609 mrem and 500 mrem. The radiographer who tried to retract the source received 1462 mrem during the event. The radiographer was removed the radiation program in his employment. No violations were cited.

File closed.

<u>I - 9448 - Medical Waste At Landfill - Methodist Healthcare System of San Antoino - San Antonio, Texas</u>

On December 15, 2016, the Agency was notified by a landfill operator that a load waste from one of the licensee's location had caused a radiation monitor alarm. The waste was surveyed and the radionuclide was identified as technetium -99m a medical isotope. The landfill operator was allowed to dispose of the waste. The licensee stated the hospital has a major construction project in progress and may have prevented someone from using the monitor. The licensee provided additional training on disposal of the waste to its employees. This is the first event at this location. One non-cited severity IV violation was noted.

I - 9450 - Radiography Source Disconnect - US NDI LLC - Abilene, Texas

On December 15, 2016, the Agency received notice that the licensee had retrieved a source disconnected via a broken drive cable. The camera was a QSA 880 Delta with a 135 curie iridium-192 source. The retrieval was performed by authorized personnel as per license conditions. The cable and cranks were removed from service and sent to the manufacturer for evaluation. It was determined by the manufacturer that corrosion had caused a failure of the inner core of the cable, leading to the disconnect. The licensee has updated its maintenance procedures to include a flex test. No violations were cited.

File closed.

I - 9451 - Increased Control Violation - Spectral Oil & Gas Corporation - Humble, Texas

On December, 14, 2016, the Agency was conducting an onsite investigation on the transfer of radioactive material from licensee A to licensee B. Licensee B failed to add the transferred radioactive material to its license. Additionally, licensee B failed to pay for renewal of its license in 2015 and the Agency had issued a violation for payment in arrears. The licensee reported that company stopped working in early 2015 due to two floods in the Humble area and that they intended to pay their licensee fee in the next 30 days and start up operations. The Agency licensing section requested a check on the storage of a 19 curie americium-241/beryllium source used for well logging. The source was secured with adequate locks however the required alarm system was shutdown and nonfunctional. On December 15, 2016, licensee B reported that the alarm system had been repaired and activated. On January 31, 2017, the licensee paid all fees and the license is now current. One violation was cited.

File closed.

I - 9452 - Radioactive Material Involved In A Fire - Eagle NDT LLC - Poth, Texas

On December 20, 2016, the Agency was notified by the licensee's corporate radiation safety officer (CRSO) that a fire had occurred at its Poth, Texas, location causing extensive damage to the building. The fire caused the roof to collapse onto the storage location for the licensee's exposure devices. Once the licensee gained access to the storage location all twelve exposure devices were removed from the storage location. The licensee inspected the devices and found two with the carrying handles melted. Radiation surveys of all the devices indicated the shielding had not been damaged. The twelve devices were sent to the manufacturer for inspection. The State Fire Marshal determined the cause of fire was an electrical short at a plug. The manufacturer report stated that due to the extreme temperatures the devices were exposed to, none of the exposure devices or sources would be usable. The sources were leak tested and the results did not indicate any had leaked. The licensee reported all devices and sources would be disposed of. No violations were cited.

I - 9453 - Nuclear Pharmacy Error - GE Healthcare - Waco, Texas

On December 13, 2016, the Agency was notified by the licensee that on November 8, 2016, they had sent the wrong activity of technetium - 99m (Tc) to a customer. The licensee's investigation found that the dose calibrator used to measure the dispensed dose was set for indium - 111 instead of Tc-99m. The customer discovered the error and contacted the licensee. The customer adjusted the dose and the patient received the correct dose. The employee who made the error was re-trained by the licensee on setting the dose calibrator. No violations were cited.

File closed.

I - 9454 - Nuclear Pharmacy Error - GE Healthcare - Temple Texas

On December 13, 2016, the Agency was notified by the licensee that two customers had been delivered unit doses' where the particle range was outside the manufacturers recommendations. The licensee's investigation determined the procedure in use did not define acceptable particle range. The procedure was changed to specify the acceptable particle range and all staff was trained on the change. No violations were cited.

File closed.

<u>I - 9455 - Lost Radiation Generating Device - All American Inspection - San Antonio, Texas</u>

On December 29, 2016, the Agency generated an investigation regarding unaccountedfor x-ray industrial radiography devices previously in the registrant's possession. Investigation discovered that the x-ray devices had been transferred to another registrant along with the remaining company assets. That registrant has the devices in storage pending registration amendment. No violations were cited.

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On February 17, 2016, the Agency was notified by a landfill operator that waste from the licensee had been identified containing radioactive material. The material was identified as diagnostic medical isotopes and allowed for disposal. This is the second such event in six months for the origin location. The licensee is purchasing a waste monitor and in the meantime will inspect trash compactors prior to departure. One violation was cited.

<u>I - 9466 - Lost/Recovered Source of Radioactive Material - Shawcor - Reeves County,</u> Texas

On February 20, 2017, the licensee's radiation safety officer (RSO) notified the Agency that one of its New Mexico radiography crews was performing radiographic operations on a pipeline that was being built in Reeves County, Texas. The crew finished work at one section and put the Spec 150 radiography device on the tailgate of their truck while they drove down the lease road and pipeline right-of-way to their next location. Unbeknownst to the radiographers, the device fell off the tailgate on the lease road. The licensee and crew learned of the loss after two contractors found the device, picked it up, put it in the back of their pickup, and took it to another of the licensee's radiography crews working on the pipeline. That crew called their site RSO who then called the crew who lost the device. The device was surveyed and readings were as expected with source in the fully shielded position. The safety plug was in the front of the camera. There was no damage to the device but the crank assembly, which was still attached, was damaged. Based on calculations by the RSO, the contractors' exposure was less than 0.2 millirem, which did not exceed any regulatory limit. During the investigation, it was learned that the crew was working in Texas and had neither transferred the source to the Texas license nor were they working under reciprocity. This issue was addressed with the RSO who instituted a system-wide transfer procedure for when devices and crews cross state lines to work at temporary job sites. Five violations were cited.

File closed.

I - 9467 - Damaged Source - Halliburton Energy Services Inc. - Houston, Texas

On February 25, 2017, the licensee notified the Agency that when one of its technicians was removing a 1.3 microcurie cesium-137 source from one of the calibration devices, he had punctured the source. All radiation safety officers (RSO) and technicians were wearing whole body dosimeters during the event. All four employees who were involved and/or responded to the event had dose ratings below 33 mrem DDE &TEDE for the monthly badge reading. Bioassay results showed negative results. Through discussion with Nuclear Regulatory Commission the source contamination event did not meet reportable limits. Corrective actions to prevent recurrence included creating a process for dismantling equipment, annual review of safety processes for dismantling of equipment by RSOs and annual training on safety processes for dismantling of equipment for all bunker employees. No violations were cited.

I - 9468 - Badge Overexposure - Medical City Dallas Hospital - Dallas, Texas

On February 27, 2017, the Agency was notified by the registrant of a potential overexposure to an individual working as a CT technologist. The individual's November-December 2016 badge had come back reading 50,196 millirem deep dose equivalent. The dose was indicated by filter analysis to be all from photons less than 40 kiloelectronvolts in energy. No potential radiological reasons for this reading have been identified. Upon investigation, the registrant has determined that the badge reading does not reflect an actual dose to the individual. The individual's dose for the monitoring period was reassigned based on an average of the past two years. No violations were cited.

File closed.

I -9469 - Gauge Shutter Failure - Marathon Petroleum LLC - Texas City, Texas

On March 3, 2017, the Agency received a report from a licensee's contractor stating the shutter on a Ohmart Vega model SHF2 gauge, containing a 500 millicurie cesium-137 source, failed to shut during maintenance on an open vessel. A lead plate was affixed to the gauge to cover the source so it could be removed until repaired. The shutter was repaired on March 27, 2017 and source holder installed back on the vessel on March 29, 2017. The cause of the failure was internal corrosion in the shutter. No licensee employee received any exposure as a result of this event. No violations were cited.

C - 2732 - Regulatory Violations - Laser Beauty Various Locations, Texas

On January 4, 2017 the Agency received a complaint alleging several issues about a laser hair company at three different locations within the state. Allegations of keys remain in the lasers, unregistreed facility, and video surveillance in patient rooms. All three facilities had a separate registration and the owner explained that none of the facilities have any video surveillance in patient treatment areas or dressing rooms. Local law enforcement was made aware of the complaint and will perform a separate investigation. The procedures for the laser operation was discussed and the keys will be removed from the laser each night to prevent any misuse. The complaint was not substantiated. No violations were cited.

File closed.

C - 2733 - Laser Safety Violations - Total Med Spa - Plano, Texas

On January 12, 2017, the Agency received a complaint about three locations for a registrant conducting laser hair removal and other laser procedures without safety signs on the doors and using improper safety glasses. On February 9, 2017, the Agency conducted an onsite investigation. Overall, the facility adhered to laser hair removal regulations. The facility did have one incorrect sign provided by the manufacturer which they fixed within a day. Additionally, for an IPL machine, the Agency found two pair of glasses that did not indicate the wavelength that they protected so a request was made to the registrant to ensure the proper safety glasses were used for the IPL machine. The facility replaced the glasses with new ones that were designed to be used with the IPL machine. The complaint was substantiated. Based on the immediate correction action, no violations were cited.

File closed.

C - 2734 - Inadequate Credentialing - Simplicity Laser of Austin LLC - Austin, Texas

On January 13, 2017, the Agency received a complaint alleging the registrant was using untrained technicians to perform laser procedures. The complaint also alleged supervision of a laser hair removal trainee was being performed by an individual who was not qualified as a Laser Hair Professional. The Agency performed an on-site investigation on March 10, 2017. The investigation found that an individual who had completed the requirements for Laser Hair R\Professional and submitted the required information to the Agency for certification, but had not received their certification was providing supervision for a trainee performing laser hair removal. The investigation was not able to substantiate the allegation that laser hair removal procedures were performed by individuals who did not have the appropriate credentials. One non-cited violation was identified

C - 2735 - Unregistered Laser Facility - Dynamic Body Design - Spring, Texas

On January 25, 2017, the Agency received a complaint that the entity was performing laser hair removal procedures without registration. An onsite investigation on February 9, 2017, found that the office space had been recently vacated. The complaint could not be substantiated. No violations were cited.

File closed.

C - 2736 - Regulatory Violation - Corpus Christi Radiology - Corpus Christi, Texas

On January 25, 2017, the Agency received a complaint that mammography images were not being provided by the registrant to patients and other facilities for the required retention period. Agency investigation and inspection staff spoke to the physician and clarified rules regarding records retention and availability. The physician stated that he had provided the records for some time, and that he thought it was enough. He has stated that he was previously unaware of the requirements, but that he will comply with them. The complaint was substantiated. No violations were cited.

File closed.

C -2737 - Regulatory Violations - Individual Laser Hair Services - Houston, Texas

On January 26, 2017 a complaint was received by the Agency regarding two individuals doing business from two different apartment complexes. Both apartment complex leasing agents were called to verify the allegations of unlicensed business operations at the facilities. The leasing managers stated that no business was being conducted from the two separate apartment locations as far as they could identify. Both tenants were reminded by the leasing managers that no business is allowed on the property and is grounds for eviction. An on-site investigation on February 22, 2017 produced no new evidence of business operations at the residences. The facility where the technicians once worked had an expired registration and are in the process of completing the physician information. Complaint partially substantiated. No violation cited.

C - 2739 - Naturally Occurring Radioactive Material - Gold Metal Recycling - Dallas, Texas

On February 8, 2017, the Agency received a complaint from the United States Environmental Protection Agency that alleged a scrap yard in Dallas, Texas, sold drill pipe to a member of the general public that was contaminated with Naturally Occurring Radioactive Material. On February 9, 2017, the Agency performed an on-site inspection at the scrap yard. According to the yard manager they had received the pipe and found it contaminated and it was to be returned to the company who had sent it to them. It was not to be sold. The person who put the load on the trailer did so in error. The material was caught at the weighing station at the scrap yard and then off loaded. The pipe was located in the back of the scrap yard. The Agency surveyed the pipe and the highest reading was 16 micro rem per hour. Additional piping in the yard was surveyed and all measured at background. The manager stated they surveyed all scrap entering the facility at the scale. They accept nothing above background because anything above background is too hard to get rid of. No violations were cited.

File closed.

C - 2741 - Regulatory Violations - Permian Nondestructive Testing Inc. - Midland, Texas

On February 14, 2017, the complainant contacted the Agency and expressed concerns that the licensee may have allowed one of its recently hired radiographers to have unescorted access to sources of radiation prior to completing the required access authorization process. The Agency's investigation revealed the complainant had no definitive information that unescorted access had occurred. Attempts to contact the radiographer were unsuccessful. The licensee's radiation safety officer (RSO) stated he remembers that when he got to the facility one day, he learned the radiographer had been scheduled to go work at a temporary job site with another radiographer who was also not yet authorized for unescorted access. The two radiographers had not left the facility. The RSO advised the operations manager that the radiographer had not been cleared yet and they assigned another authorized radiographer to go in his place. The RSO also reported that the licensee ceased its operations on or about February 22, 2017, and has transferred all of its radiographic devices/sources back to the manufacturer. The complaint was not substantiated. No violations were cited.

File closed.

<u>C -2742 - Response to Public Concern- Radon - Memorial Hermann Health System- Houston,</u> Texas

On February 16, 2017 the Agency received a complaint form with allegations of hazards at a medical facility. The person alleged x-ray units leaking radiation as well as radon gas possibly causing cancer to employees. The complainant expressed several staff were suffering and died of cancer at the hospital who worked in the maternity unit. The complainant suggested the hospital was hiding information about testing and would not provide information to the employees. The facility was contacted and the risk management section had completed several different tests to include air, water, radon, radiation, and chemical testing at the facility. The radon results were provided to the Agency and placed in the file. No above normal limits were observed. The other testing results were shared with employees and are available to employees through the risk management department. The complaint was substantiated. No violations were cited.

<u>C -2743 - Response to Public Concern - Technologist Crushed - Memorial Hermann Health System - Houston, Texas</u>

On February 24, 2017 the Agency received a call from a person stating a technologist was crushed while using a linear accelerator. The person alleged the hospital may have been doing inappropriate practices and wanted an investigation alleging the hospital was covering up information. An investigation was conducted and discovered that the accident regarding the technologist was investigated by the Occupational Health and Safety Administration on February 21, 2017. The facility was also referred to the Health Facility Compliance section for further investigation. A technologist was crushed by the interlock door and died due to his actions during calibration and setup functions of the accelerator. No radiation hazards were associated to the event. Compliant was substantiated. No violations were cited.

File closed.

C - 2744 - Laser Hair Removal Violations - Pristine Image Med Spa - Tyler, Texas

On February 28, 2017, the Agency received a complaint about a Laser Hair Removal (LHR) facility including improper treatment for a burn, no procedures for the lasers, and inappropriate LHR treatment on patients. On May 5, 2017, the Agency contacted the facility and determined that the facility was not registered to conduct laser hair removal. The facility had no complaints from clients about burns. The facility had registered LHR technicians. The facility did not know a registration with the Agency was required, the owner stated he would quickly submit an application. I discussed the concerns from the complainant. The facility reported it had laser procedures and conducted continual training for the employees working the machines. On July 13, 2017, the Agency verified the facility owner had submitted an application and fee for registering the facility. The complaint was partially substantiated. No violations were cited.

File closed.

C - 2745 - Laser Injury - Dallas Associated Dermatologists - Dallas, Texas

On March 14, 2017, the Agency received a complaint from a complainant stating that a medical laser hair removal procedure had caused second degree burns in March 2015. No report to the Agency regarding a medical event was made at that time by the registrant. The injuries were corroborated with medical records from the time with the registrant's client. The complaint was substantiated. One violation was cited.

C - 2711 - Unregistered Laser Facility - Black Diamond Spa - San Antonio, Texas

On September 19, 2016, the Agency received a complaint alleging that a laser hair removal facility was operating without registration. Investigation revealed that the facility and a related facility with a different address were offering laser services without registration. Laser facility registration paperwork and related fees have been submitted for each facility. The complaint was partially substantiated. No violations were cited.

File closed.

C - 2712 - Unregistered Laser Facility - Glo Salon Spa/ Shantham INC - Houston - Texas

On September 19, 2016, the Agency received a complaint that a laser hair removal facility was operating without registration. Several attempts were made to contact this facility. The ownership of the business has changed and the current owner has sent in a registration form on January 4, 2017. The registration form was accepted with payment in the licensing section. Registration is in process. Complaint was substantiated. No violations were cited.

File closed.

<u>C - 2718 - Radioactive Material Found at Scrap Yard - M-L Pipe Service/KS Piping - Midland/Nocona, Texas</u>

On October 12, 2016, the Agency received an email from the State of Arkansas stating an individual in Arkansas had bought pipe that came from two locations in Texas. It was reported that the buyer found the pipe to be contaminated with radiation when they attempted to sell the pipe to a steel mill. The Agency conducted on-site investigations at both locations identified by the State of Arkansas. The Agency performed radiation surveys at both locations and did not find any pipe that exceeded 20 microrem per hour. Both locations stated pipe is surveyed prior to entering their facility and they reject all pipe reading greater than background. The complaint could not be substantiated. No violations were cited.

<u>C - 2725 - Unregistered X-ray Service Company - Tri County Dental Supply - San</u> Bernardino, California

On November 29, 2016, the Agency received a complaint from a Dental Office that X-ray equipment installed in November 2011 by a service company was not installed in accordance with Food and Drug Administration regulations, specifically not registered. The Agency determined that the out of state service provider was not registered in Texas to install x-ray equipment. According to information provided, the equipment was purchased from the company, and that an employee of the company installed the x-ray equipment and demonstrated its effectiveness by taking an image of his own teeth. The complaint was substantiated. Two violations were cited.

File closed.

C - 2728 - Regulatory Violations - Texas Pain & Spine Institute PLLC - Amarillo, Texas

On December 12, 2016, the Agency received an anonymous complaint about the movement of a registered fluoroscopy device. He was concerned about the location of use, calibration, and proper registration of the machine. The Agency performed an on-site investigation on January 18, 2017. The registrant was in possession of three radiation generating devices and not two as indicated on the registration. The radiation safety officer stated they had transported the device in question from Lubbock to Amarillo, but it was not in use as it needed repairs. On January 23, 2017, the registrant sent the amendment to its registration to correct the number of units. A non-cited severity four violation was identified during the investigation.

File closed.

C - 2729 - Regulatory Violations - Unknown Craigslist Posting - Garland, Texas

On December 19, 2016, the Agency was contacted by the Federal Bureau of Investigation reporting a craigslist posting of an individual wanting depleted uranium cut into sample sizes. The Agency attempted to contact the person who posted the advertisement by personal and state email and received no response. The Agency contacted Craigslist and had posting removed. The Agency monitored Craigslist for two additional weeks looking for a repost of the advertisement but it was not reposted. The Agency did not pursue any further action due to the low radiation risk from depleted uranium. The complaint was not substantiated. No violations were cited.

C - 2730 - Unregistered Laser Facility - Etre Belle - Dallas, Texas

On December 29, 2016, the Agency received a complaint about the registrant. The complaint included allegations of laser hair removal procedures being performed by uncredentialed individuals and by individuals in training without adequate supervision. Additionally, the complaint alleged burns and adverse reactions not referred to a contracted physician. An on-site investigation on February 2, 2017 revealed that the facility was operating without current laser hair removal or laser services registrations. A physician was working with the facility in the capacity of a consulting physician, but this physician was not the physician on file. Additionally, keys were not removed from laser machines when not in use, and various required notifications were not made to the Agency regarding changes of business name and laser safety officer. The complaint was partially substantiated. Ten violations were cited.

File closed.

C - 2731 - Regulatory Violations - Garden Oaks Veterinary Clinic PA - Houston, Texas

On December 30, 2016, the Agency received an anonymous complaint alleging that during the time the complainant was employed by the registrant and assisted with x-ray procedures, the registrant only provided a protective vest/apron and failed to provide gloves or thyoid shield and failed to monitor the complainant's exposure to radiation. The Agency's investigation was unable to make a determination concerning the provision of gloves or thyroid shields without more information from the complainant. The registrant stated aprons, gloves, and thyroid shields are openly available for employee use. The Agency reviewed dosimetry reports from January 1, 2016 to present and information provided by the registrant. It was learned that the registrant failed to adequately monitor public dose during that time and failed to monitor the occupational dose for seven employees for either part or all of the time they were employed. The registrant had recognized several of the issues in October 2016 and made some corrections. The registrant has taken further corrective actions and instituted new procedures to monitor public and occupational dose as a result of the Agency's investigation findings. The complaint was partially substantiated. Five violations were cited.